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Commercial Museum
(Philadelphia, Pa.)

Philadelphia as a seaport
and manufacturing city

[Philadelphia]

[1899]

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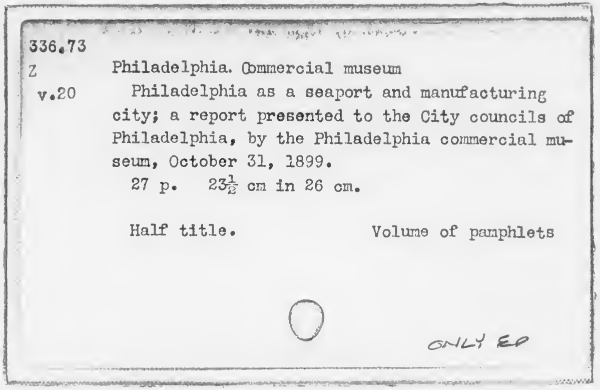

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Philadelphia as a seaport and manufacturing city; a report presented to the City councils of Philadelphia, by the Philadelphia commercial museum, October 31, 1899.
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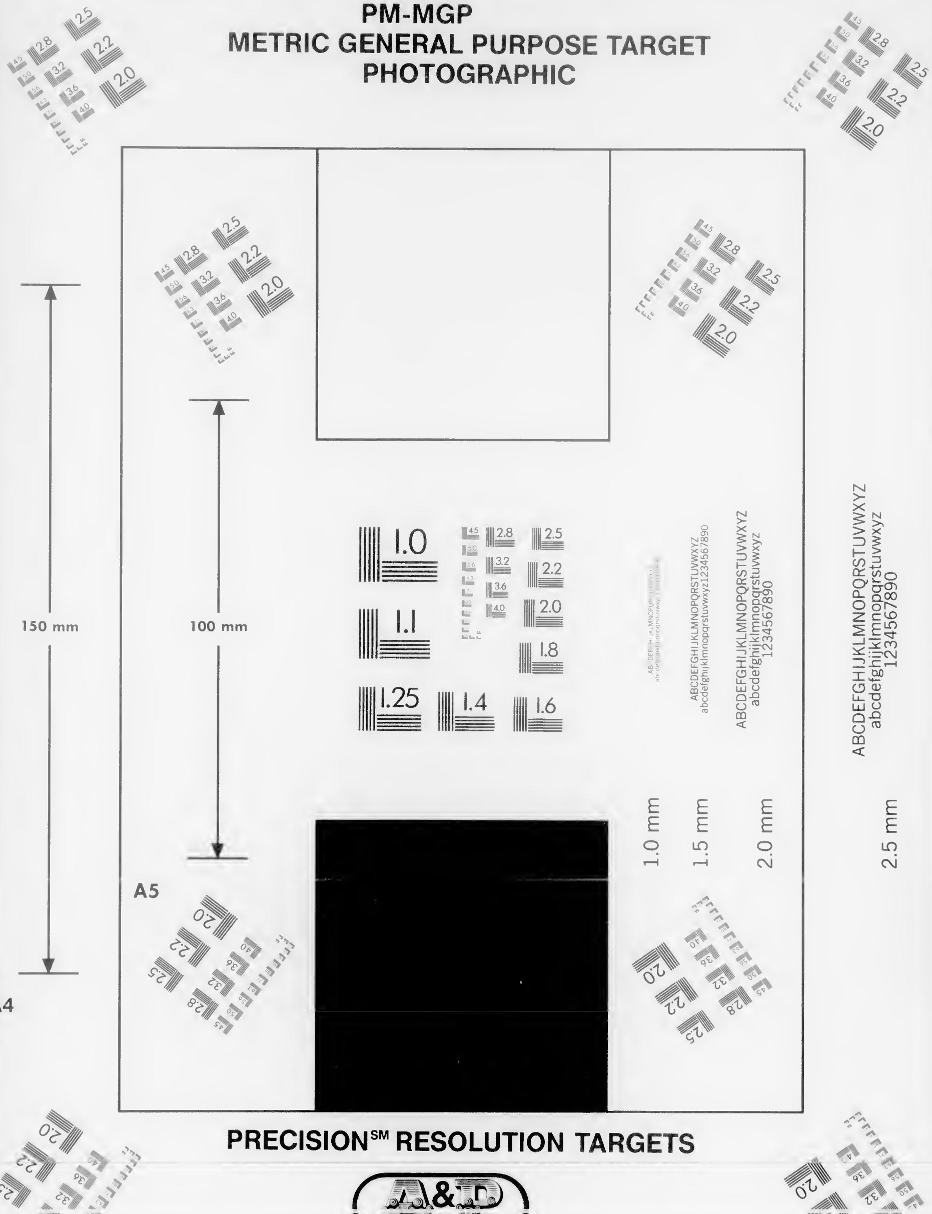
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PHILADELPHIA

AS A

Seaport and Manufacturing City.

SEAL OF THE PHILADELPHIA MUSEUMS

COMPILED

FOR

The City Councils of Philadelphia

BY

THE PHILADELPHIA
COMMERCIAL MUSEUM.

PHILADELPHIA

AS A

Seaport and Manufacturing City.

A REPORT

PRESENTED TO

The City Councils of Philadelphia

BY

THE PHILADELPHIA
COMMERCIAL MUSEUM.

OCTOBER 31, 1899.

The Philadelphia
Commercial Museum

AN INSTITUTION maintained by public appropriations and operated under the guidance of an International Advisory Board, made up of leading Chambers of Commerce and commercial organizations throughout the United States and in many other countries.

The object of the Institution is to aid in the building up of the foreign trade of America.

The requirements of foreign markets are closely studied and reported; samples are secured of the most saleable articles, and at the same time of the products offered in return. Shipping and custom-house regulations, current prices, best routes of shipment, etc., are fully reported. Merchants in all foreign countries are systematically investigated, direct and through intermediaries, with special reference to their fitness to undertake American business.

This work of the Museum is undertaken for the benefit of American manufacturers and merchants, from whom correspondence and inquiries are welcomed.

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PHILADELPHIA

AS A

SEAPORT AND MANUFACTURING CITY.

In all parts of the commercial world there has recently taken place a marvelous awakening to the importance of oversea trade and the vital part which great harbors play in the growth and development of a country and people. Trade, the great civilizer and teacher, has brought home to the leaders of thought and the wielders of power the great truth that no man, or body of men, liveth to himself alone in the closing days of the nineteenth century; while those who make laws, equally with those who obey such laws, now realize the interdependence of all peoples and the beneficent influence exercised over the whole fabric of national life by international trade.

Taking this broad view of the prevailing sentiment in favor of foreign trade, and the mighty part such trade may be led to play in the service of the government, it is easy to account for, equally easy to approve, the energy shown by the various centers of power in the State in the development of facilities for export and import traffic. But this great sweep of public sentiment towards the systematic development of foreign trade is coincident with another movement equally important, equally far-reaching in its influence. The movement referred to is that quickening of municipal life, that new interest in municipal affairs by the average citizen, which is now to be noted in nearly every great center of population throughout the civilized, or what might be called the commercially civilized world.

Great cities have recently come into new realization of their dignity, their powers and their duties; and the old habit of referring everything touching the prosperity of a city to the care of the national government, and leaving vital decision on such matters wholly to officials lacking personal acquaintance with the requirements of the trade locality, has been succeeded by a municipal policy marked by active propaganda and intelligent participation in the shaping of the national policy. This growth in municipal self-consciousness and self-assertion is evidenced in such great undertakings as the Manchester Canal, in the more recent determination of the Manchester corporation to take over the control of the water and tramway facilities of that great center of industry in England.

There is always behind every great movement which outruns precedent some great necessity. This awakening of municipal life, and this new interest in national policies, is the direct fruit of penalties suffered by great cities in times past from a course of too implicit, too unquestioning confidence in the wisdom and liberality of the national authorities. Consequently, the great cities of the Old World have been taught the lesson that each locality, each municipality, must be unceasing in its effort to bring before the central government the peculiar necessities of their individual commercial life. Further, that only by a watchfulness which is sleepless, an energy that is tireless, can that central government be forced to take proper cognizance of the necessity of each trade center.

The great lesson of the importance of foreign trade, of the necessity of good harbors, of the duty of each municipality to plead loudly and continuously before the bar of public sentiment and to the ear of national government, has not as yet been fully learned in the United States. As a nation we lead the world in agriculture, manufacture, in the arts and sciences; a country of homes, we offer the world an example of systematic civilization, adding to the happiness of a great people in a thousand and one ways never contemplated by our ancestors, never enjoyed by the most favored nations in other centuries. All this has come as the result of our marvelous prosperity; and that prosperity has been the fruit of a high quality of energy, directed by a still higher quality of intelligence. But times change, and, as the old saying has it, "we must change with them." The question naturally arises, Have we changed with the times? Have we kept step, in the march of progress, with Old World municipalities, our equals in wealth and population?

A backward glance furnishes some surprising comment on our present optimism; answers, in a measure, the question in regard to the position of Philadelphia in the ranks of great municipalities.

When our nation began its life, 18 per cent. of our foreign trade w carried in American bottoms; in 1789, as a result of fostering legislation b Congress, this percentage rapidly increased until, in the opening days of th century, 90 per cent. of our commerce was carried in American ships. B early in our national existence we were forced to learn the lesson of the inte dependence of commercial life; to stand a helpless witness while the Amer can merchant marine was slowly, but steadily, driven from off the face the great waters. To-day less than 10 per cent. of our immense commerc leaves the shores of the Republic under the American flag.

The following table eloquently tells this story of the decline of o merchant marine:

(See pages 9 and 10.)

RISE AND FALL OF AMERICAN MERCHANT MARINE.

YEAR.	Foreign Trade. Shipping.	Shipping, Per Capita.	Commerce, Per Capita.	Proportion of American Carriage in Foreign Trade.	
				Imports.	Exports.
	Tons.	Cubic feet.	Dollars.	Per cent.	Per cent.
1789	123,893	3.64	14.00	17.5	30
1790	346,254	9.75	12.17	41	40
1791	363,110	9.81	13.03	58	52
1792	411,438	10.55	13.39	67	61
1793	367,734	8.96	13.95	82	77
1794	438,863	10.32	15 91	91	86
1795	529.471	12.03	26.76	92	88
1796	576,733	12.53	32.28	94	90
1797	597,777	12.45	27.54	92	88
1798	603,376	12.06	26.01	91	87
1799	657,142	12.63	30.33	90	87
1800	657,107	12.33	30.04	91	87
1801	630,558	11.26	36.06	91	87
1802	557,760	9.74	26.04	88	85
1803	585,910	9.84	20.33	86	83
1804	660,514	10.82	26.67	91	86
1805	744 224	11.81	34.31	93	89
1806	798,507	12.28	35.53	93	89
1807	810,163	12.54	36.84	94	90
1808	765,252	11.09	11.51	93	88
1809	906,855	12.77	15.71	88	84
1810	981,019	13.43	20.84	93	90
1811	763.607	10.18	15.29	90	86
1812	758,636	9.78	14.91	85	80
1813	672,700	8.40	6.23	71	65
1814	674,633	8.17	2.41	58	51
1815	854,295	10.05	19.47	77	71
1816	800,760	9.12	26.10	73	68
1817	804,851	8 94	20.76	79	74
1818	589,954	6.39	23.31	85	80
1819	581,230	6.08	16.55	87	82
1820	583,657	5.95	14.70	90	89
1821	593,825	5.88	12.63	92.7	84.9
1822	582,701	5.63	14.05	92.4	84.1
1823	600,003	5.63	14.03	92.1	87.4
1824	636,807	5.79	14.23	93.4	88.7
1825	665,409	5.88	17.33	95.2	89.2
1826	696,221	6	14.01	95	89.6
1827	701.515	5.87	13.54	94.3	87.5
1828	757.998	6.18	13.12	91.4	84.5
1829	592,859	4.70	11.65	93	86
1830	537.563	4.15	11.14	93.6	86.3
1831	538,136	4.94	13.80	91	80.6
1832	614,121	4.48	13.74	89.4	75.8
1833	648,869	4.63	14.11	90.7	75.5
1834	749.376	5.18	15.97	89	74.4
1835	788,173	5.32	18.25	90.2	77.3
1836	753,094	4.95	20.94	90.3	75.4
1837	683,205	4.38	16.56	86.5	77.6
1838	702,962	4.39	13.84	90.6	82.8
1839	702,400	4.25	17.13	88.7	78.3
1840	763,838	4.48	14.05	86.6	79.9
1841	788,398	4.48	14.15	88.4	77.8
1842	823.746	4.53	11.23	88.5	76.3
1843	856,930	4.36	11.50	77.1	77
1844	900,471	4.66	11.38	86.7	70.5
1845	904,476	4.54	11.65	87.3	75.8
1846	943.307	4.60	11.48	87.1	76.2

RISE AND FALL OF AMERICAN MERCHANT MARINE

(CONTINUED).

YEAR.	Foreign Trade. Shipping.	Shipping, Per Capita.	Commerce, Per Capita.	Proportion of American Carriage in Foreign Trade.	
				Imports.	Exports.
	Tons.	Cubic feet.	Dollars.	Per cent.	Per cent.
1847	1,047,454	4.96	14.46	77.2	65.3
1848	1,168,707	5.38	14.24	82.9	71.1
1849	1,258,756	5.62	13.10	81.4	68.9
1850	1,439,694	6.23	14.28	77.8	65.5
1851	1,544,663	6.47	18.22	75.6	69.8
1852	1,705,650	6.93	17.18	74.5	66.5
1853	1,916,471	7.50	19.60	71.5	67.1
1854	2,151,918	8.18	22.16	71.4	69.3
1855	2,348,358	8.63	19.72	77.3	73.8
1856	2,302,190	8.19	22.83	78.1	70.9
1857	2,268,196	7.83	24.33	71.8	60.2
1858	2,301,148	7.72	20.27	72	75
1859	2,321,674	7.58	22.73	63.7	69.9
1860	2,379,396	7.58	24.27	63	69.7
1861	2,494,894	7.76	18.19	60	72.1
1862	2,173,537	6.62	13.28	44.8	54.5
1863	1,926,886	5.75	17.46	43.3	40
1864	1,486,749	4.35	19.61	24.6	30
1865	1,518,350	4.36	17.36	29.9	26.1
1866	1,387,756	3.91	28.47	25.1	37.7
1867	1,515,648	4.18	24.28	28	39.1
1868	1,494,389	4.06	23.02	33	36.6
1869	1,496,220	3.97	23.25	31.3	34.9
1870	1,448,846	3.76	25.76	33.1	37.7
1871	1,363,652	3.45	28.70	31	32.6
1872	1,359,040	3.37	30.80	26.8	29.8
1873	1,378,533	3.33	32.42	27	25.7
1874	1,389,815	3.27	30.88	30.2	24.6
1875	1,515,598	3.48	28.00	29.2	23.7
1876	1,553,705	3.46	25.51	30.9	25.4
1877	1,570,600	3.41	25.95	31.6	23.7
1878	1,589,348	3.36	25.59	32.3	22.7
1879	1,451,505	3.00	24.60	31.7	17.6
1880	1,314,402	2.62	32.27	22.9	13.1
1881	1,297,035	2.52	32.58	21.4	13.1
1882	1,259,492	2.39	29.71	18.6	13.1
1883	1,269,681	2.35	29.76	17.4	13.1
1884	1,276,972	2.31	27.37	20.8	13.8
1885	1,262,814	2.23	24.34	20.3	11.4
1886	988,041	1.71	24.67	19.5	11.9
1887	989,412	1.67	25,46	18.3	10.5
1888	919,302	1.52	25.25	17.8	10
1889	999,619	1.56	26.12	17.1	11.6
1890	928,062	1.47	27.52	16.7	9.4
1891	988,719	1.54	29.20	15.9	9.3
1892	977,624	1.49	28.94	17.7	8.1
1893	883,199	1.32	25.08	15.5	8.8
1894	899,698	1.31	22.05	19.4	8.7
1895	822,347	1.18	21.85	15.5	8.2
1896	829,833	1.16	22.77	15.7	8.5
1897	792,870	1.09	25.01	15	8.1
1898	726,213	.99	24.16	16	5.9

Since 1876, notwithstanding the fact that our exports have exceeded our imports by $14,000,000,000, the decline of our shipping employed in foreign trade still continues.

A common criticism of Americans is that they fail to appreciate the great value of their natural waterways. For to the foreigner these natural avenues of intercommunication, with their free offering of transport facilities, represent forces in the development of the continent, and in the creation of national wealth, the value of which it would be hard to overestimate. To such foreign students of things American, the position of Australia is testimony to the unique position which the United States holds, owing to the number, lengths and navigable character of her rivers. For in the case of the vast continent in the southern hemisphere progress has been checked and internal development delayed through the lack of just such natural avenues to link the fertile plains of the interior with the cities on the coast. The great Murray River is the largest on the continent of Australia which enters the sea by an independent mouth. And yet this river, which, with its tributary, the Darling, is nearly 2000 miles long, empties into the sea through a shallow sheet of water, barred with sand dunes and wholly unfit to play its great part as the waterway of a nation; all traffic borne towards the sea, from the immense empire which it drains, being forced to debark at a point a few miles from the mouth and complete the journey by rail.

What we have already said has a general bearing and applies with equal force to all great cities. Coming closer to our subject and dealing with the peculiar conditions under which the foreign trade of Philadelphia has developed in the past, and must be conducted in the future, we are, first of all, confronted by the circumstance that nature has given to the old Quaker City what should prove a great natural highway to the sea. The Delaware River is one of the first features of our city which arrests the attention and commands the admiration of the foreign visitor. In the opinion of such a visitor, this natural waterway should prove a source of inestimable wealth to the great manufacturing city resting upon its banks. To the student of trade problems, be he either foreign or American, this river is certain to suggest that great law of economics, that man is strongest when he works in partnership with nature and seeks to press forward along the line of least resistance. Nature has done much for us. Have we supplemented the work of nature by making full use of this natural avenue for foreign trade? To answer this question, let us take a brief survey of what might be called the early commercial history of our mighty river:

The charter of Charles II. empowered the proprietary to erect and constitute, within the province, such and so many seaports, harbors, creeks, havens, keys and other places for discharge and unlading of goods and merchandises out of the ships, boats and other vessels, and landing them into such and so many places; and all ships, boats and other vessels which shall come into and out of the said province, shall be laden or unladen only at such ports as shall be erected by the proprietary, who shall admit and receive in and about all such havens, ports, creeks and keys the king's officers of the customs and their deputies.

By his charter of 1701, William Penn constituted the city of Philadelphia to be a port or harbor for discharging and unlading of goods and merchandises out of ships, boats and other vessels, and for lading and shipping them in or upon such and so many places, keys and wharves there as by the

Mayor, Aldermen and Common Council of the said city shall, from time to time, be thought most expedient for the accommodation and service of the officers of the customs in the management of the king's affairs, and preservation of his duties, as well as for the conveniency of trade. The said port or harbor to be called the port of Philadelphia, which shall extend into all such creeks, rivers and places in the province, and shall have so many wharves, keys, landing places, and belonging thereto for landing and shipping of goods as the said Mayor, Aldermen and Common Council, with the approbation of the chief officers of the customs, shall, from time to time, think fit to appoint.

At the time of the grant of the charter by Charles II., the port of London, by the common law and the statutes, had legal quays and sufferance wharves, which were authorized to receive goods liable to duty, besides private wharves, on each side of the Thames, for home produce, such as wood, coals and beer, which might be landed or shipped in any place. To each species of wharf there are attached certain shore duties, as they are called by Lord Hale, such as "wharfage or keyage, a toll or duty for the pitching or lodging of goods upon a wharf," and Cunningham calls it money paid for landing goods at a wharf or quay, or taking goods into a boat and from thence.

The wharves in the port of Philadelphia were of two kinds—public, such as the ends of streets, which were for the use and service of the city—private, such as were erected by the owners of the soil. In both cases, as the right of the riparian owner extends only to low-water mark, the privilege of erecting wharves to project into the stream was, therefore, one which might be granted or withheld, at the pleasure of the proprietary or his successor the State. This control was the more necessary as the proprietary, with the assent of the freemen of the province, might assess such reasonable customs and subsidies on merchandise and wares, there to be laded or unladed, as upon just cause, and in due proportion, they might deem expedient and proper. As the proprietary was also the owner of the three lower counties on the Delaware, commonly called the territories, his territorial right extended over the bay and river, beyond the limit of the province, and powers were exercised over them by the provincial legislature, which arose from the fact that the same person was the proprietor of both, and his principal habitation was in Pennsylvania, where his great seaport was situated.

We find amongst the early Colonial laws acts imposing duties upon imports and exports, as also tonnage duties on ships and vessels; and in 1763 the Provincial Assembly, to encourage commerce, and to render the entrance into these ports more secure, passed an Act for erecting a lighthouse at the mouth of the bay of Delaware, at or near Cape Henlopen, and for placing and fixing buoys in the said bay and river Delaware, and, three years afterwards, an Act for appointing wardens for the port of Philadelphia, and for the regulating of pilots plying in the river and bay, and the price of pilotage to and from said port. After various other Acts on the same subject, the Provincial Assembly, on February 26, 1773, passed a consolidated Act, appointing wardens for the port of Philadelphia, the preamble of which designates its object. It recites that the regulating of pilots plying in the river and bay of

Delaware, the placing of buoys therein, and the erecting of a lighthouse at Cape Henlopen having been found on experience to have greatly contributed to the ease and security of the navigation of the said river and bay and the trade of the province, and that it is convenient that the said pilots, lighthouse buoys and piers thereinafter mentioned should be put under one general direction.

This Act appointed seven wardens by name, who were to choose one of their number president, and to appoint a clerk. They were to examine all persons offering to serve as pilots, and to grant three kinds of certificates. The rates of pilotage were fixed, subject to adjustment by the wardens, who were to make rules and regulations concerning the pilots. Persons taking up any anchor and stock, or any anchor without a stock, or any cable in the river or bay, were to deliver them to the president or one of the wardens under a penalty of £100. Any person destroying any of the buoys or beacons in the bay or river, or burning or destroying the lighthouse on Cape Henlopen, upon conviction was to forfeit £1,000, to be imprisoned three years, and to be whipped once in every year during such imprisonment at the common whipping post with any number of lashes not exceeding thirty-nine.

The Act then provides for the erection on the river of piers at convenient distances, in which vessels may take shelter during the inclemency of the winter, and the wardens are to make the necessary contracts for building the same on land purchased by them. A tonnage duty was imposed upon vessels coming into or going out of the province, and Thomas Combe was appointed collector. The wardens were to appoint the keeper of the lighthouse and to maintain the buoys, piers and lighthouse in good order, and to lay their accounts yearly before the committee of accounts of the Assembly for the time being, and the duration of the Act was limited to fifteen years.

The charter of the city having been put an end to by the Revolution, and the corporation itself being dissolved, and all its powers and jurisdictions having entirely ceased, there was no local body having immediate charge of the wharves and harbor of Philadelphia to remedy this defect; the General Assembly of the Commonwealth, on the 1st April, 1784, passed an Act for the further regulation of the port of Philadelphia, and enlarging the powers of the wardens thereof. The preamble set forth that it is become necessary that further regulations should be established for preserving good order in the anchoring, mooring and removing of ships and other vessels within the harbor, and that the wharves extending into the common highway of the river Delaware are, and of the right ought to be, subject to such regulations as may best promote the conveniency of the public and the general increase of commerce, preserving nevertheless, as far as may be consistent therewith, the rights of private property. It then appoints seven persons as wardens and one as collector, who is also the clerk or secretary of the board. It gives the wardens power to regulate the making of wharves, with an appeal to the Supreme Executive Council, and it also prescribes the mode in which the wharves may be used and occupied for the mooring of vessels, subject, however, to the control of the wardens, and fixes the rates of wharfage to be paid to the owner or possessor of a wharf, where no agreement for the same has been made with the same.

The wardens are also empowered to remove vessels which occupy wharves for an unreasonable length of time, and to make rules to guard against such inconveniences and mischiefs, with an appeal from any order or sentence of the president, or one of the wardens, to the Board of Wardens. The Act also gives a summary authority to the board to ascertain the damages, and awarding payment thereof by the proper party, in cases of vessels accidentally or negligently running foul of each other. The General Assembly, on the 4th October, 1788, passed an Act to establish a Board of Wardens for the port of Philadelphia, and, for the purposes therein mentioned, consolidating the provision of former laws and repealing all former Acts.

This Act was altered in some particulars by a supplement, passed 27th March, 1789.

The adoption of the Constitution of the United States, and the cession of the lighthouse at Cape Henlopen, with the beacon, buoys and public piers in the river Delaware, having rendered unnecessary many of the provisions of the existing laws, an Act was passed to repeal them on the 13th April, 1791. These Acts were also repealed by the Act of 11th April, 1793, to establish a Board of Wardens for the port of Philadelphia, and for other purposes therein mentioned, which, in addition to the former provisions, constituted the master warden, the health officer, which was taken away by the action of 22d April, 1794, establishing an health office. By a supplement, passed the 22d April, 1794, a harbor master was appointed, with large executive powers over the port, the docks and wharves, and the vessels in the river; and the Act to which it was supplement was continued, except so much as relates to the rate of wharfage, until the 1st January, 1797. By other acts this Act was continued; the last one, passed the 9th April, 1799, carrying it up to the 9th April, 1802, and to the end of the next session of the General Assembly, and containing a new section, which formed afterwards the 12th section of the Act of 1803.

All these laws were repealed and succeeded by the Act of 29th March, 1803, which forms the groundwork of the present system, and the only disputed portion of it as interfering with the power of Congress has been held to be constitutional by the Supreme Court of the United States. This Act was in fact substantially a consolidation of existing laws. The board consisted of one master warden and six assistant wardens, four of whom were to be inhabitants of the city of Philadelphia, one of the Northern Liberties and one of the district of Southwark, to be yearly appointed by the Governor, and they were authorized to employ a clerk. The Governor was to appoint a harbor master, removable at pleasure. The power of the wardens over the erection of wharves into the river Delaware below low water-mark extended to the city and Liberties. By an Act of the 25th March, 1805, the City Councils were given the same power over the ends of the public streets and alleys on the Schuylkill that they possessed over those on the Delaware, and the authority of the wardens over the erection of wharves was extended to both shores of the Schuylkill, from the lower falls thereof to its junction with the Delaware; and by an Act of the 1st April, in the same year, the wardens were authorized to remove obstructions and erect piers in the river Delaware below the city, and the tonnage duties levied by its provisions received the assent of Congress on the 28th February, 1806. This Act was extended and continued by an Act of Assembly of the 20th March, 1811, to which the assent of Congress does not appear to have been obtained. By the Act of 7th February, 1818, an appeal is given to the Court of Quarter Sessions of the County of Philadelphia from the decision of the wardens in relation to the erection of wharves on the Delaware, and a jury summoned to report on the propriety of granting a license, which report may be confirmed or set aside by the court, which judgment shall be final and conclusive. The second section imposes a penalty of $4,000 upon any person erecting or extending any wharf, or building in the nature of a wharf, into the tideway of the river Delaware, contrary to the provisions of the Act, and authorizes the wardens, upon conviction, to remove or abate such wharf. By an Act of the 11th April, 1825, the State ceded to the United States the piers and wharves at Chester. By an Act of the 9th April, 1835, the Act of 1818 was extended to the river Schuylkill, on either of its shores, from the lower falls thereof to its junction with the river Delaware; and by an Act of the 23d February, 1837, this Act and the Acts to which it refers were extended to League Island in the river Delaware.

By the 45th section of an Act of the 19th March, 1838, the Chamber of Commerce of Philadelphia and the Philadelphia Board of Trade were each authorized to elect annually two assistant wardens, so that the Board was then made to consist of one master warden and an assistant, appointed by the Governor, and four assistant wardens, appointed as therein directed; and by an Act of the next year the Governor was authorized to appoint one additional assistant warden, who should be an inhabitant of the district of Kensington.

Under an Act of the 24th March, 1832, passed to carry into effect certain provisions of the will of Stephen Girard, it was made lawful for the corporation of the city to lay out Delaware avenue, and to straighten Water street, and also to fix the easternmost line to which wharves fronting the city of Philadelphia may be extended; to fix the level of wharves, to prescribe their form and materials, and to prohibit erections east of said avenue. If the line as fixed is not approved by the Board of Wardens, an appeal lies to the Court of Quarter Sessions, whose decision will be equivalent to that of the Board of Wardens, no one, however, to erect wharves out to the regulated line without their license, as heretofore.

The extracts given above from the early commercial history of the Delaware River do not pretend to place on record all, or even the most important, features of that history. What we have given are merely such items as seem to emphasize most clearly the deep interest of the authorities in those early days in the commercial development of the river, and the unmistakable desire, on the part of such authorities, to carry into effect the plan of William Penn, to make Philadelphia an example before the world of a combination of manufacturing center and seaport—a seaport so far removed from the sea that danger from the guns of a hostile fleet would never menace her development nor give pause to her commercial progress and prosperity.

The wise and liberal policy inaugurated by the early officials of the city of Philadelphia has been continued by their successors from generation to generation. But even when we give full credit to what has been done by the local authorities toward the development of the Delaware River on the lines of a great commercial highway, we are forced to admit that when contrasted with the work performed, and the expenditures cheerfully borne, by smaller and less wealthy communities abroad, the action of our authorities seems to have fallen a little short of their full duty. Perhaps it will drive the lesson of this comparison more deeply home to the hearts of the people, if we call attention to the work of certain Old World cities in behalf of foreign trade and the development of harbor facilities. We will take as our first example the free port of Hamburg.

Hamburg's free port, including all changes and innovations, and with the exception of the new warehouses, has cost, up to date, about $30,940,000. According to the original estimate, approved in February, 1883, the cost was to be only $25,228,000, but, as the limits of the contracted free port were twice extended subsequently to the treaty between Hamburg and the Empire, the amount had to be increased to $30,940,000. It will be remembered that, according to the treaty, the Empire was to pay $9,520,000 toward the costs, and that on the day of the annexation of the city proper to the customs union the regular duty had to be paid upon all dutiable articles at that moment within the limits of the newly-annexed district. The duties thus collected aggregated $1,570,800, and, instead of going to the imperial treasury, they were turned over to that of Hamburg. Therefore, deducting this amount and the contribution of the Empire, there remained $19,849,200 of costs to be paid by the little state of Hamburg. A public loan had to be made to meet these expenses. As provided, the Empire's contribution was paid in ten equal cash installments of $952,000 each.

It is only natural that in an undertaking of this importance and magnitude, the estimates should not turn out correct or exact in every instance or item. In some few cases, the amounts actually expended were below the estimates, while in many others the limits of the estimates had to be overstepped. Some of the plans had to be extended, because during the course of construction many of the buildings, quays, harbors, waterways, etc., were found to be inadequate. The existing harbors, including those provided for in the estimate, were soon found to be too small to accommodate all the vessels. The new warehouses did not suffice for the storing of large quantities of goods, and from year to year additions had to be made to meet the actual requirements of the shipping and commercial interests. The necessity of these innovations and additions to the original plans was directly due to the changes rendered necessary by the city's annexation, and therefore the expense caused by them must properly be included in the costs of the annexation of Hamburg and the contraction of its free-port limits.

The principal additions and innovations referred to, and which, up to date, have materially helped to increase the originally estimated cost of the whole work to $30,940,000, are the following: The lengthening and deepening of the sailing ship harbor, and supplying the same with solid quay walls throughout; the construction of sheds on the American quay; the deepening of the Baaken and Moldau harbors; the construction of the Baaken lock; the purchasing and fitting up of railway property back of the Baaken harbor;

the construction of the Hansa and India harbors, together with the Africa, Australia, India and Oswald quays, the Bremen and Lübeck shores; the construction of the Spree harbor, south of the Veddel canal; the construction of sheds at the Peterson quay and Kirchenpauer quay; the placing of a row of large dolphins in front of the Kirchenpauer quay; the construction of canals at the Kleine Veddel, on the Kleine Veddel, on the southern bank of the Elbe; the construction of additional canals and streets on the Kleine Grasbrook; the expenses of the customs canal and the Baaken bridge above the estimates; the increasing of the size and general dimensions of various custom houses and dispatching offices; the construction of various new railway tracks, connections, etc.; the construction of coffee and dining halls; the construction of a hall, with waiting rooms, for the embarkation and disembarkation of passengers on ocean steamers (this is the building where all emigrants sailing from Hamburg are inspected and examined previous to their embarkation); the purchasing of the Hamburg-American Line property and warehouse at the Jonas, at the foot of St. Pauli, on the north bank of the Elbe; the construction of three bridges for pedestrians in the warehouse district, and additional electric and hydraulic connections; the construction of a tunnel for pedestrians under the railway tracks at the Brookthor; the improving of the Brookthor lock; the construction of additional quay walls, steps, landing stages, etc., in the warehouse district; alterations in streets north of the customs canal, not included in the original estimate.

The above-mentioned costs did not include those of building the warehouses on the Kehrwieder-Wandrahm Island. These were defrayed by the Free Port Warehouse and Storage Company, and amounted to about $3,286,000. As these warehouses, however, have not proved sufficient for the wants of the company, it was obliged to make arrangements for further storage facilities. Accordingly, it rented from the city a space back of the sheds on the Asia quay and facing the Moldau harbor, upon which it constructed three large sheds, at a cost of about $200,000, the government warehouses on block J, and the government warehouses at the end of the Kaiser quay and next to the custom house in the Meyerstrasse. Besides, it leased for a period of fifty years the property bounded by the Neuer Wandrahm, the Kannengiesserort, the St. Annenufer, and Bei St. Annen on the Kehrwieder-Wandrahm Island, upon which it constructed warehouse blocks, the costs of the greater part of which are included in the above amount of $3,286,000. Altogether, the company's construction account shows an expenditure of about $3,570,000, which amount was met by the sale of the $2,142,000 shares of stock and by the issue of $1,190,000 first mortgage bonds, bearing 3¾ per cent. interest, and of $238,000 second mortgage bonds, bearing 4 per cent. interest. Of the first mortgage bonds, $48,000 have been thus far paid off.

Adding the above amount of $3,570,000 to the general costs of the free port, the total sum of $34,510,000 is obtained as the entire cost of the whole undertaking. For a small state like Hamburg, though its capital, with some 620,000 inhabitants, is the principal port on the European continent, this was a large amount to expend within the comparatively short space of a little more than twelve years. Through it, it certainly has provided for itself one of the finest ports in the world, with facilities and accommodations unsurpassed.

For customs purposes—of course, not politically—the free-port district of Hamburg is regarded and treated as a foreign country. Therefore all goods, whether dutiable under the tariff of the customs union or not, may pass into the same free from any molestation whatever, but as soon as they leave the same and pass into any part of the customs union, they become subject to a regular entry, and, if dutiable under the tariff, to the payment of the prescribed rate of duty. The declaring, entry, withdrawal, examination, controlling, etc., of these goods and the liquidation of the duties thereon are governed by the laws and regulations of the customs union; but, of course, the peculiar position caused by a territory exempt from customs duties and situated in the heart of a large seaport, about 100 miles from the ocean, has obliged the authorities to issue special laws and regulations for the purpose of meeting all emergencies, complications and requirements that would not be likely to, or could not, arise at other points of the customs boundary.

Situated as it is about 100 miles inland, all vessels coming from sea are obliged to pass through just that extent of customs territory before they can reach its free port. To avoid the complications that would be likely to arise from such a condition of affairs, the navigable channel of the Elbe had to be set aside as a sort of free passage from the sea to the free port, and vice versa, and this arrangement led to the issuing of the customs regulations for the Lower Elbe. They are enforced with the greatest possible leniency, so that traffic between the free port and the open sea, both inward and outward, is in reality not hampered in the least. A vessel coming from a foreign country and laden with dutiable goods from keel to deck, before entering the mouth of the river Elbe, hoists her customs signals, and after receiving free pratique from the quarantine station at Cuxhaven (if the vessel signals that she had no sickness on board, she is not even stopped) proceeds up the river and to her moorings in the free port without as much as being hailed by a customs officer. In the free port she discharges her cargo, which, without the slightest customs formalities, can be transferred to the free-port warehouses, and after taking in a fresh and dutiable cargo and hoisting her customs signals she again, without the slightest molestation from the customs authorities, can pass from the free port down the river to the sea. Should she on her outward voyage be bound for a port within the German customs union, her hatches are sealed prior to her sailing. Upon her arrival at her destination the seals are removed by customs officers and her cargo is entered n accordance with the laws and regulations of the customs union.

In touching this point, attention must be called to the fact that though he limits of Hamburg's free port have been reduced since 1888, its character has remained the same. There were no charges to vessels for the use of the ree port as such, and there are none at present. There is only a very small ax on merchandise entered at and exported from the free port, the so-called declaration tax, which amounts to 1 per mille of the declared value on all goods entered, and one-tenth per mille of the declared value on all goods exported. Transit goods are not subject to the declaration tax, but all goods

have to be declared, and the blank used requires stamping. The stamp tax is 2⅜ cents per declaration. The tax is therefore only a nominal one, and just about pays the expense of getting up the statistics compiled from the declarations.

Besides this tax, the regular harbor dues are charged, but these have absolutely no connection with the free port, but in character are about the same as those levied in any other port of the world. They are as follows:

TONNAGE DUES.—The tonnage dues for steamers entering the port of Hamburg are 2.86 cents per cubic meter (1 cubic meter = 35.316 cubic feet) on foreign (British) measurement, or 2.38 cents per cubic meter on German measurement. The difference between the two computations, even for good-sized vessels, is a trifling one. In this connection, it should be mentioned that British and most foreign measurements of steam vessels furnish a smaller tonnage than the German measurement, because in the former the space occupied by the engine, etc., is not included, while in the latter it is. For sailing vessels, the tonnage dues are 2.86 cents per cubic meter. Only half of these dues are charged to vessels which arrive in ballast and depart with a cargo, and to those which are laden only with lumber, kindling wood, empty bottles, cinders, chicory root, coke, coal, cement, roofing tiles, ice, oak bark, earth, slabs, gypsum, broken glass, herrings, charcoal, lime, limestone, boneblack, chalk, empty jugs, kitchen salt, bricks, sea salt, sand, slate, cattle for slaughtering purposes, staves, stones, clay, common earthenware, peat, trass, tufa, or sugar scum. Vessels with a smaller tonnage than 120 cubic meters, and those entering and departing in ballast (for instance, for repairs), are exempt from all tonnage dues.

CLEARING CHARGES.—For clearing all vessels of a greater tonnage than 200 tons, both inward and outward, a fee of $21.42 is charged.

PILOT DUES.—These dues are collected without regard to the nature of the vessel's cargo, but according to her depth of draft. From the time the vessel enters the River Elbe until she is moored in the port she requires three pilots, or, at least, she is compelled to pay for their services. The first pilot takes her from the Island of Heligoland to the Bösch pilot station near Glückstadt on the Elbe; the second, from the Bösch station to the port; and the third, from there to her moorings. The fees for the first class of pilots are as follows:

Depth of Draft	Summer Tax.	Winter Tax.
1 meter (3 feet 3⅜ inches)	$5.95	$8.33
2 meters (6 feet 6¾ inches)	8.33	10.71
3 meters (9 feet 10 inches)	10.71	15.47
4 meters (13 feet 1 inch)	16.67	23.80
5 meters (16 feet 4⅞ inches)	27.37	36.89
6 meters (19 feet 8¼ inches)	42.84	57.12
7 meters (22 feet 11⅝ inches)	58.31	78.54
8 meters (26 feet 3 inches)	69.02	93.77
9 meters (29 feet 6⅓ inches)	76.16	104.48

These fees are figured according to a schedule for drafts from one to nine meters, which rises by tenths of meters. Each part of one-tenth of a meter is counted as a full tenth. The minimum fee is $5.95 in summer, and $8.33 in winter. The summer season runs from April 1 to September 30, the winter season from October 1 to March 31. The following discounts are allowed: 25 per cent. if vessels only proceed to Cuxhaven; 75 per cent. if vessels cannot obtain a pilot until they reach Cuxhaven; 50 per cent. if vessels enter without cargo or in ballast (as far as they only serve to give the vessel the necessary stability, the following articles are regarded as ballast, viz.: sand, earth, building rubbish, rough stones and water); 50 per cent. if vessels sail from Cuxhaven; 10 per cent. for each voyage, which the same vessel has made under the command of a Cuxhaven government pilot, after he twelfth voyage in a calendar year; 20 per cent. for each voyage, which he same vessel has made under the command of a Cuxhaven government pilot, after the twenty-fourth voyage in a calendar year; 30 per cent. for each voyage, which the same vessel has made under the command of a Cuxhaven government pilot, after the thirty-sixth voyage in a calendar year.

An extra fee of 50 per cent. may be charged when the government pilot s compelled to pilot the vessel to an Elbe port above Glückstadt. The fees for the pilot from the Bösch pilot station on the Elbe to the port of Hamburg are 86 cents per German foot (16 feet American are equal to 17 feet German). If the river is full of drift ice, these pilots are obliged to transfer their station to Cuxhaven, and they are then entitled to charge double the above fee.

The harbor pilot receives a fee of $2.38 per vessel.

As soon as there is drift ice in the river the towage is according to special agreement.

Towage in the port itself is always according to special agreement.

Quay Dues.—The expenses for discharging on the quays are the following: The vessel pays 3.75 cents per cubic meter (35.316 cubic feet), German measurement, or 4.17 cents per cubic meter for foreign steamers and measurement. The latter vessels can, however, subject themselves to German measurement, and are then only chargeable at 3.57 cents per cubic meter on the tonnage thus obtained. The measuring fees are comparatively light and will hardly exceed $15 for the average steamer.

On the cargo, quay dues amounting to 23.8 cents per 2200 pounds are collected, of which the consignees return 7.14 cents per 2200 pounds to the vessel.

Stevedores' and Tally Clerks' Fees and Lighterage.—These fees are not fixed, and are subject to special agreement.

Old and New Dues.—The official harbor dues and charges to vessels have not been increased since the opening of the free port in its present state, but the transportation expenses for merchandise in the same have certainly grown. This has often been felt and complained of in commercial circles. The distances between the various harbors have become much greater, and in consequence the moving of goods calls for more time and greater expenses. Many of the barges and lighters which prior to 1888, when the port was not divided up into so many harbors at remote distances from the city, were poled along by hand, are now obliged to engage tugs to enable them to cover these distances within reasonable time.

Crossing the Channel to England we find another example of harbor work in aid of foreign trade in the recent extensions of the docks of Southampton.

In November, 1892, the transference of the docks from the ownership of the Southampton Docks Company to that of the London and Southwestern Railway Company was made, and from this event the present epoch in the history of the enterprise must be dated. Six years prior to 1892, however, namely in the spring of 1886, the railway company had, under the sanction of Parliament, lent to the dock company the sum of $1,250,000, wherewith to commence the construction of a new deep-water dock; and this new dock, for which Merrs. S. Pearson & Son were the contractors, was opened with great ceremony by the Queen on the 26th of July, 1890, receiving by her Majesty's command the title of the "Empress Dock." Accordingly, the property acquired by the Southwestern Company in 1892 included the Open Dock of 16 acres, depth 31 feet, area of quays 3720 feet, opened in 1843, and constructed at a cost of $700,000; the Inner Dock, 10 acres, depth 28 feet, quay space 3300 feet, opened in 1851; the Itchen Extension Quay, over 1700 feet long, opened in 1876, with a depth of 20 feet of water at low water of spring tides, and 33 feet at high water; the Empress Dock, 18½ acres, depth 26 feet at low water of spring tides, quay space 3460 feet, built at a cost of $1,500,000, opened by the Queen in 1890; and the following dry docks: No. 1, length 400 feet, width 66 feet, depth of water on sill 17 feet at high water, neap tides; No. 2, length 280 feet, width 51 feet, depth of water on sill 11 feet at high water, neap tides; No. 3, length 500 feet, width 80 feet, depth of water on sill 21 feet at high water, neap tides; No. 4, length 450 feet, width 56 feet, depth of water on sill 21 feet at high water, neap tides. Undoubtedly excellent though these facilities were, however, they did not come up to the requirements of the new proprietors and their patrons, and so the London and Southwestern Railway Company, very shortly after coming into possession, set about the construction of the Prince of Wales Dry Dock, which remains the largest single dry dock in the world. Its dimensions are: length, 750 feet; width at sill, 87½ feet; width at coping level, 91 feet; maximum depth, 35 feet; capacity, 73,000 tons.

The immensity of this undertaking is indicated effectively by a series of statistics from which the following are selected: Number of men engaged in the work, 1100 to 1200; locomotives, steam cranes, etc., used, 85; dredgers, 3; barges and hoppers, 26; tugs and launches, 5; number of yards of soil excavated, 224,000; yards of concrete put in, 100,000; ditto of Cornish granite laid, 45,000; quantity of Portland cement used, 22,000 tons; loads of timber employed, 10,000; piles driven, 20,000 feet; brick work laid, 6000 yards. The Prince of Wales Graving Dock holds 14,500,000 gallons of water at high water, neap tide.

The dock is easily entered from the Empress Dock, and the site has been so chosen that it can be lengthened to 1000 feet, although its present capacity is not likely to be found insufficient for some time to come. An interesting illustration of the value of such accommodation is often furnished by the largest vessels of the American Line going across the Atlantic, one after the other, to be overhauled at Southampton, because there is no dry ock which can receive them either at New York or Philadelphia. There is uch a dock at Newport News, but it is too far away, and the directors of he International Navigation Company consider it better to send the ships to Southampton. The dock has now been in use for three years and its work-ng has given the greatest satisfaction. The pumping engines are the most owerful in the world, and the dock is regularly emptied in less than two ours and a half. This new graving dock was completed and opened by the Prince of Wales on the 3d of August, 1895.

But by the completion of this splendid dry dock the Southwestern uthorities by no means put an end to the important plans of extension which they had taken in hand. There was still a large area comprising some fifty acres of mud-lands between the original docks and the rivers tchen and Test, which, if reclaimed, promised to furnish an excellent site or quays, right up to the sides of which the largest vessels might come, thus aking the use of tenders unnecessary, and upon the making of these new eep-water quays the energies of the engineer, Mr. W. R. Galbraith, and of he contractors, Messrs. John Aird & Co., were concentrated immediately fter the completion of the graving dock. Some $10,000,000 have already een spent on this important work.

The new quays may be divided for purposes of description into hree sections. The first section extends for a distance of about 1650 feet, ommencing at the entrance of the Empress Dock, and running due south long the River Itchen, from which it obtains the name of the Itchen Quay. The site upon which it stands was dredged to a depth of twenty-eight feet elow low-water level, and then three rows of piles were driven and concrete eposited up to low-water level, a superstructure of timber being built there-pon. The section runs at right angles westward from the Itchen Quay and s known as the South Quay, as it faces in that direction. For its construc-ion cylinders had to be sunk to a depth of forty-two feet below low-water evel, to form what is known as a "toe" to a wall constructed of concrete locks. These latter were laid in their places by divers. The upper portion f this quay was constructed of concrete in mass. From the termination of his south quay northwestward along the River Test runs the third section f the work—the Test Quay, or southwest wall, which is nearly 1600 feet in ength. In laying the foundations yet a third method of construction was mployed. First a trench was dug to the level of the underlying peat. Then halk was brought by the Southwestern Railway from Micheldever and de-osited in large quantities to form a reclamation bank, or enclosing wall. The water was then pumped out and the foundations of the quay wall laid n a second trench, the sides of which were supported by timber. The foun-ations were composed of concrete in mass, neither block nor cylinder being mployed. Thus a wall was raised to a height of 61 feet. The bank was f course subsequently removed to form part of the "backing" of the quays, which is entirely composed of chalk from Micheldever. With the addition f these new works the total quayage at Southampton Docks reaches the mposing total of 23,572 feet, and there is still a large area of unreclaimed ands awaiting future extensions.

The Itchen Quay has already been used for a considerable time for the berthing of the Union, Castle and North German Lloyd steamers, and its equipment with railway lines, sheds, cranes, etc., is practically complete.

The accommodations thus afforded are sufficient for the stowage at the same time of both import and export cargo, with the result that the largest liner can be unloaded and loaded again without change of berth—a great economy in quay space. Another feature of the new sheds at Southampton is, that the railway lines running through them have been laid in a trench, up to the side of which the ground floor of the shed gradually inclines. This is obviously a great advantage in the loading and unloading of trucks, as it places the goods on the right level for handling without hoisting.

Hamburg and Southampton are but two instances in a long list of cities that, having fully grasped the value of harbor facilities to the nation and the municipality, have willingly expended immense sums in the development of waterways and the provision of berthing accommodations for the world's merchant marine. London, Liverpool, Glasgow, are three ports which, in this connection, naturally come to the mind as striking examples of the policy of free expenditure to improve the gifts and facilities of beneficent nature. For it is a curious circumstance that nearly every great harbor in the world requires constant, intelligent and careful action on the part of the authorities to keep them in a condition of free navigation. The Thames has vexed the highest engineering skill for generations and employed the best of English talent to keep it open to the commerce of the world. Liverpool, despite the free expenditure of money and the continuous employment of the highest engineering skill that money may command, remains still under the menace of its bar. Glasgow must pay each year a penalty in steel and iron to the tortuous channel of the Clyde. And yet these natural obstacles, at the gateways of the world's great ports, serve but to quicken, in the local authorities affected, a municipal spirit which, once quickened, has invariably had a beneficent effect upon the whole spirit of administration in municipal affairs. Thus in each case the minor obstacles which nature has placed in the way of a city's enjoyment of some greater gift of nature has gone to prove the truth of the old saying, "that he who wrestles with me, strengthens me; my enemy is my helper." Moreover, it is a curious coincidence, and one worthy of note, that in the history of the ports mentioned, a distinct rise and fall in the prosperity of each city is coincident with an increase and decrease in public spirit on the part of the citizen, runs parallel with a broad-minded policy, or its opposite, on the part of the officials chosen for high offices by such citizens.

The great port of Liverpool, resting satisfied with the splendid record of past achievements, adopted some years ago a conservative policy, retrenched its expenditure sharply, and turned a deaf ear to legitimate complaints from that mercantile interest which had been the true source of its wealth and world-wide reputation. Swiftly came the revenge of commerce. The Manchester Canal sprang into existence, and the trade of the world felt instantly the impulse of this new element. At the same time, and on the other side of Great Britain, Southampton sprang suddenly into prominence as a port of debarkation for oversea traffic. Even the great port of London, grown sluggish as a natural sequence to excess of wealth and divided interests, discovered a new lease of commercial life. These new elements in the commercial situation rapidly combined to teach Liverpool a sharp lesson in the spirit of modern enterprise. That lesson was well and quickly learned by the city on the Mersey, and to-day the shipping facilities of Liverpool are vastly in advance of the facilities prevailing five years ago. It has been an expensive experiment for the prince of the world's ports, and it would be well if municipalities the world over, taking swift warning from the example of Liverpool, were to avoid the penalties reaped by that city for her failure to realize, that the brightest and best record in times past will not suffice in the commercial struggle of times present, or prove equal to the necessities of times to come.

The expenditure of the various commercial nations upon their waterways and ports, when taken in the aggregate, represents a sum so vast as to suggest the thought that the price paid for commercial empire is as greatly out of proportion to the results secured as is that price, in blood and treasure, so frequently paid for political empire. But a sober second thought, fruit of closer study and deeper investigation, brings convincing proof to the open mind that the prize for which the maritime world is making such a valiant fight is a prize worthy of man's highest effort, an object worthy of the most liberal expenditure by all nations.

We give below a table, prepared from the latest data obtainable, showing the sea-borne tonnage of eighteen representative ports of the commercial world, from the year 1885 to 1898, together with a percentage of increase, shown by each port, during the period covered by our table, a period which reflects the commercial development of the most interesting and instructive epoch in commercial history.

PORT.	Year.	Tons.	Year.	Tons.	Per cent. of Increase.
London	1885	12,049,137	1897	15,197,659	23
New York	1886	10,947,273	1898	15,348,042	40
Hamburg	1885	7,318,490	1898	14,747,451	101
Constantinople	1887	7,099,012	1897	9,820,628	38
Liverpool	1885	9,995,351	1897	11,261,051	12
Hong Kong	1885	7,699,099	1898	16,879,000	119
Cardiff	1885	6,949,268	1897	11,990,609	72
Antwerp	1885	6,814,257	1897	6,415,501	—5
Gibraltar	1885	8,029,972	1897	7,244,468	—9
Rotterdam	1887	4,920,933	1897	6,897,164	40
Marseilles	1885	6,735,508	1897	10,735,399	59
Hull	1885	2,995,373	1897	4,140,982	40
Philadelphia	1886	2,050,552	1898	3,228,738	57
Southampton	1885	1,733,687	1897	3,008,209	73
San Francisco	1886	1,594,897	1898	2,215,838	38
New Orleans	1886	1,379,496	1898	3,240,517	132
Boston	1886	2,203,029	1898	3,582,362	62
Baltimore	1886	1,129,338	1898	3,479,331	208

It is only necessary to select a few examples from the above list to emphasize sufficiently all arguments in favor of liberal expenditure on harbors. Hamburg, which has shown such a liberal spirit in this matter, in the table above exhibits an increase of 101 per cent. in her tonnage; Southampton, with a gain of 73 per cent. in tonnage, up to 1897, has already reaped a rich reward for her enterprising spirit. New Orleans, thanks to liberal expenditure upon harbor facilities and waterways, exhibits an increase in tonnage during thirteen years of 132 per cent., while Baltimore leads the whole list with an increase of 208 per cent. The percentage of gain credited to London is only 23 per cent., but then London's gain in tons is about equal to the total tonnage of Philadelphia at the present time.

What we have already stated clearly establishes two points—

(1) Harbor facilities play a vital part in the development of the commercial life of a nation.

(2) This great truth is fully realized by foreign states, and is now incorporated in the scheme of national as well as municipal policy.

But now the question naturally arises, Does not the improvement of harbor or waterways benefit one class in a community at the expense of other and equally deserving classes? Do not the shipping and exporting class benefit to the greatest extent by this large expenditure in aid of foreign intercourse?

Taking Philadelphia as an example of a great municipality, how is this question answered?

The root idea of the policy of William Penn was, to found a city which should produce and yet be in a position to load its manufactured products within sight, or compass of the manufacturing area, into the shipping that was to carry such products to the ends of the earth. Modern thought, the highest modern opinion, the ripest experience in matters commercial, all unite in holding that, in the cheap rehandling of products during transit between producer and consumer, rests the great secret of profit and loss on such trade or exchange of products. In other words, if there is but one loading and unloading between home producer and foreign consumer, foreign trade becomes a great element in national wealth—this element steadily losing strength as you increase the number of rehandlings.

In the history of Philadelphia this fact is vividly illustrated. It is within the memory even of the present generation that Philadelphia was the great manufacturing city of the New World. Every writer and speaker of the first rank so described the Quaker City to preceding generations.

Philadelphia had, moreover, a large accumulated capital fund: within her corporate limits, twenty years ago, gathered what the whole world recognized and described as the finest body of skilled labor on the globe. We had ample capital, ample skilled and unskilled labor, unequaled manufacturing privileges provided to our hands by a beneficent nature; fuel for the asking in unlimited quantities; willing and masterful servants to do our bidding in the great rivers that washed our wharves. On the other hand, New York City made small claim to manufacturing pre-eminence in other days. That city was premier of foreign trade, a great distributing and financial center. It lacked cheap fuel, was poor in skilled labor, and even in the matter of unskilled labor ranked below many American cities of less pretension. But New York wooed and won the merchant marine of the world; and the blessing of low freights, the facility to handle the largest tonnage, soon began to draw to the city of New York such great manufacturing interests as worked on close margin and were forced to ship at the lowest possible cost. How do the cities of Philadelphia and New York stand to-day in the race for manufacturing supremacy? Let the figures given hereunder answer this important question:

	City of Philadelphia.	City of New York.
Number of industries	18,166	36,311
Capital invested	$375,249,715	$600,672,366
Number of employés	260,264	468,274
Total wages paid	$135,917,021	$298,415,418
Cost of material used	$311,645,804	$527,618,152
Value of product	$577,234,446	$1,062,667,094

Now take the story which is told by the remarkable figures quoted above, and consider it in the light of the table given below, showing the position Philadelphia is holding in the list of American ports.

SEA-BORNE TRAFFIC.

Port.	Tonnage.		
	1865	1875	1898
New York	4,180,000	8,730,000	15,348,042
Philadelphia	300,000	1,200,000	3,228,738
Boston	1,330,000	1,400,000	3,582,362
San Francisco	720,000	1,470,000	2,215,838
New Orleans	120,000	970,000	3,240,517

During the period in which New York has moved to the front rank as a manufacturing city—1875 to 1898—she has increased her tonnage by 6,618,042 tons; in the same period Philadelphia has increased her tonnage only 2,028,738 tons. Viewing the figures from another standpoint, we find that the new tonnage gained during the period by the port of New York is twice the total tonnage by Philadelphia at the present time.

In the light of such an exhibit, the question of improved harbor facilities becomes a question which touches every class in the community. For it is not simply a question of holding our present foreign trade, but of retaining our vast and valuable manufacturing interest. And the loss of that manufacturing interest would mean more to Philadelphia than a similar loss to any other city in the world. For the Philadelphia workman is a man who lives in his own house—that is, occupies a separate dwelling; moreover, he lives well, spends his money freely. Once lessen or, in a degree, cripple our factories, machine shops and shipyards, and you empty houses by the hundred, destroy the retail trade of shops by the thousand, reduce the money in circulation to a minimum, and touch the income of thousands in no way directly interested in shipping or foreign trade.

Harbor facilities and the improvement of our great river is, then, a subject which touches all classes of the community, and must influence, for good or ill, the fortunes even of people living now upon fixed incomes, and apparently having no direct interest in trade and navigation problems.

From a broader standpoint, this question of an American merchant marine is one which calls for our closest attention. Take this one fact for evidence: It is said that the payment made to foreigners, for freights and insurance, averages 15 per cent. of the value of our sea-borne commerce. If this be a correct estimate, we paid to foreigners on our commerce of the year 1898, for such service, the immense sum of three hundred million dollars ($300,000,000).

Does Philadelphia share in this terrible waste of national wealth? Let us take the figures of 1898 for answer:

	Value.
Sea-borne commerce out of Philadelphia carried in American vessels	$352,432
Sea-borne commerce out of Philadelphia carried in foreign vessels	$59,000,000

He who runs may read the answer in these distressing figures. And in the story told so vividly by the cold facts lies, we urge, motive strong for determined action on the part of the municipal authorities. As long as New York can load a ship to the draught of 30 feet and let that ship find the open waters of the sea in less than two hours, while a vessel out of Philadelphia drawing less than 26 feet consumes fourteen hours in reaching the ocean, so long will present conditions tend to become permanent and our supremacy as a manufacturing city stand in constant peril.

While it is true that the care of our great waterway is directly placed under the central government, the exigencies of the present situation certainly justify a careful consideration of the policy of liberal appropriations by both State and city to this great work, even should the disbursement of such money take place through officials beyond the actual control of the municipal authorities.

Then, too, a public sentiment, earnest, unanimous and alert, should stand behind our Congressional delegation, to the end that aid from the National Treasury may come speedily, as well as freely, to the prosecution of this great work.

We are at the parting of the ways; we cannot, as a city, stand still. Backward or forward, is the question regarding our future history. Which shall it be? To such a vital question there can be, we think, but one answer, and that answer—**Forward.**

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